

IMPROVED FLUID PASSAGES FOR POWER GENERATION EQUIPMENT

Abstract of Disclosure

A cooling apparatus for fuel cell components is provided wherein the cooling apparatus comprises a base plate having an upper section and a lower section. A plurality of upper ribs and a plurality of lower ribs are coupled to the upper section and the lower section, respectively. Each of the plurality of upper ribs and lower ribs define an upper serpentine channel and a lower channel wherein such channels are formed between each of the plurality of upper ribs and lower ribs, respectively. In addition, the upper serpentine channel and the lower channel are fluidically coupled by at least one cavity disposed in the base plate wherein the upper serpentine channel and the lower channel are disposed to allow a flow of a fluid therethrough so as to enhance the heat transfer between the fluid and the fuel cell components.

Figures